

“Intelligence Analysts Need Training on How to Think”

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Never in history has there been a more critical time when the United States military has had to focus on how military intelligence analysts are trained to fight today's battles to win tomorrow's wars. Soldiers need instruction that will enable them to more effectively combat the current threat. It has been an ongoing struggle to adapt to unconventional methods. Now that the US is in a new kind of war, it is important to train soldiers not only to win today, but win in the future as well. Soldiers must focus not on the current temporary fixy, but on a solid foundation that will work tomorrow. This can be accomplished by training analysts to have a better understanding of their own thinking processes and thereby allow them to predict the enemy's actions more accurately. It is important to define the problems associated with training analysts in order to develop a more functional training method.

There are inherent problems with the concept of teaching critical thought and evaluating that thought through standardized testing methods. The consistent evaluations are used to determine the effectiveness of training. A common fault with this method becomes even more destructive when students become intensely concerned about their grade or class standing. Military institutions focus on teaching those critical tasks. However, the operational tempo in today's Army requires that students develop those skills in a very short period of time. This can inadvertently stifle the intent. When soldiers are told that a course can be passed with a certain percentage, their mindset is likely to change. Instead of focusing on learning, they focus only on what is tested. The trainers who also have to deal

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with a time constraint will focus the majority of their lessons on testable material. This focuses the course inside a figurative box. If their training is confined within those limits, there is simply not enough time to transition their minds and learn the necessary information. The danger is that the box will never go away. Students will leave the course still thinking in those parameters without taking in the entirety of the situation. For them it is easier then to mold the world and adjust it to fit the box. Instead of looking for alternate solutions they will stick with the patterns developed in their training. Richard J. Heuer states, "We behave rationally within the confines of our mental model, but this model is not always well adapted to the requirements of the real world."¹ This is where set boundaries and definitive scores can fail a soldier. This creates a structure that is very successful in a school environment but is severely limited in an operational setting. This is a short term solution. When confronted with the complex requirements throughout the operational intelligence environment students will see the inevitable failure of this approach. The answer is the formation of a clear foundation upon which a young analyst can build.

One of the main points in Heuer's *Psychology of Intelligence Analysis* is that the human mind is flawed and not ready to conduct analysis. It is important for intelligence analysts to have an understanding of thought processes and the flaws associated with those processes. The human mind has several biases that hinder critical thought. These can impede the proper examination of problems and will lead to defective analysis. To demonstrate this, Heuer uses several examples to highlight how the mind might work against the analyst and affect proper understanding. The first example he uses shows how, "we tend to perceive what we expect to perceive."² In Figure 1, a set of three triangles is displayed with messages inside. During the exercise the student will read each triangle and then will be asked if anything of interest was noted.



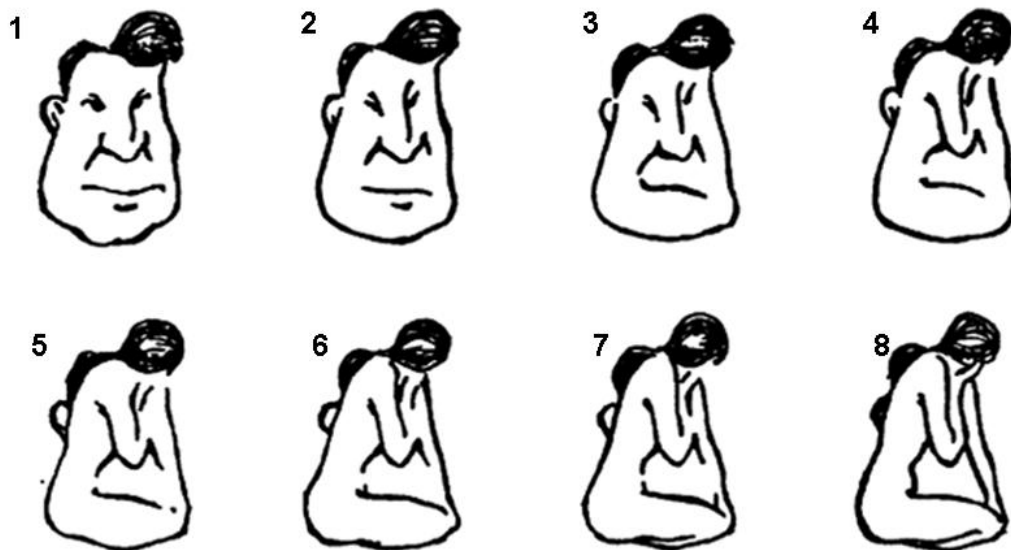
Figure 1

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As the student goes through the figures they assume a coherent sentence, and most will not catch the double words (Triangle 1 = THE, Triangle 2 = A, Triangle 3 = THE). The human mind is trained already to ignore what is there and read what should be in its place. This shows how information can be incorrectly processed by an observer and how the mind will only consider what it expects. This is extremely important to weigh while creating a training course for analysts.

Another fallacy is that "mind-sets tend to be quick to form but resistant to change."⁴ This is depicted in Figure 2 with eight images that morph from one form to the next. In this exercise, one student will start at the top left while another will start at the bottom right. Each student should then identify at which point the image changes from man to woman or woman to man.

Figure 2



Impressions resist change.

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Through testing, Heuer has recorded that the viewer tends to keep the image they started with longer. Reviewing these images from left to right most observers identify the change to occur around number six or seven while those beginning from the other direction perceive the shift between two and three. Different analysts can expect to look at same problems with the same approach and yet get different answers. Also, if a familiar event is taking shape they will expect it to play out as their experience has shown them in the past. This is important for trainers to ensure that they are not creating a mold that students will apply to every problem that comes their way.

Heuer then goes on to explain that “New information is assimilated to existing images.”⁶ The example he uses is displayed in Figure 3. During this exercise the student will be asked what they see in

this image. They will then be asked whether there is a young girl or an old woman depicted. The student will then practice seeing both perspectives.

Figure 3



It is difficult to look at the same information from different perspectives.

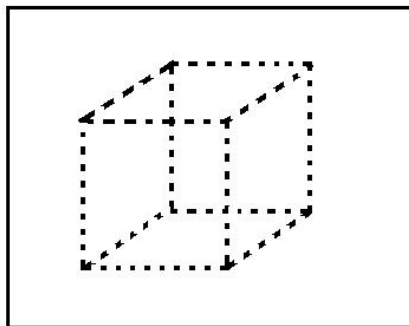
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The student will have to change the way they look at the picture to see both images. This helps people see that there can be two points of view to one situation and it is not always easy to see them both.

Once an analyst understands the limitations of their mind, they are able to start learning how to develop the process of improving the way they evaluate a problem. By knowing the limitations of their analysis, they can start seeing past a singular point of view. Once this is achieved, it is then possible to break the habit and introduce new ways of thinking that will allow analysts to see problems from multiple perspectives, most importantly that of the enemy.

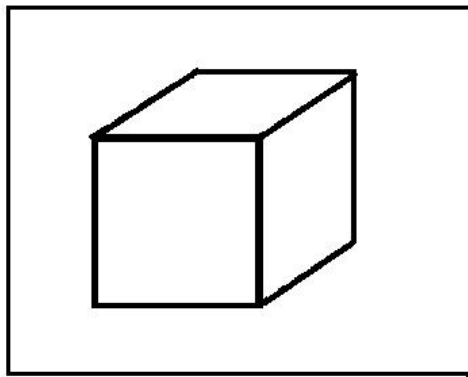
People do not view all situations in the same way. Culture, experience, race and history will influence how someone will observe an event. It is important for analysts not only to know this, but to use it when confronted with a problem. As stated in the article *Analytical Methods in Intelligence Analysis* "Intelligence analysts must know themselves. They must understand their own lenses that they use to process, filter, channel, or focus information."⁸ The first step in overcoming this barrier is to gain the ability to visualize a situation with new eyes. Heuer tried to explain this step by using the image of the young and old lady, but he only scratched the surface. This fallacy must be overcome if the goal is to observe a problem with the least amount of bias. Heuer believes "One of the more difficult mental feats is to take a familiar body of data and reorganize it visually or mentally to perceive it from a different perspective"⁹. To demonstrate training in this area a simple drill using a cube can be used. Figure 4 is an outline of a cube.

FIGURE 4



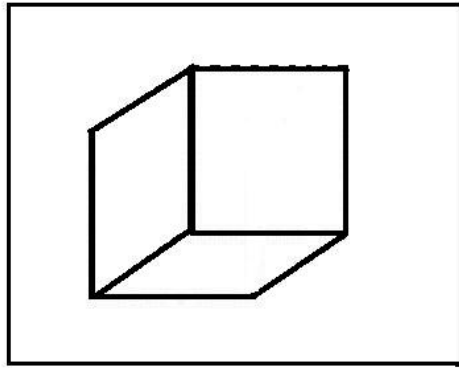
This is the starting image. The student will then be asked to identify a 3-dimensional cube from the drawing. Once the student forms the cube in their head, they will then be told to describe the cube. It is important to note that not everyone will see the same cube. There are two possibilities. The first image is the side of the cube facing the readers that is directed toward the bottom left. Figure 5 will demonstrate what the cube will look like from this perspective.

FIGURE 5

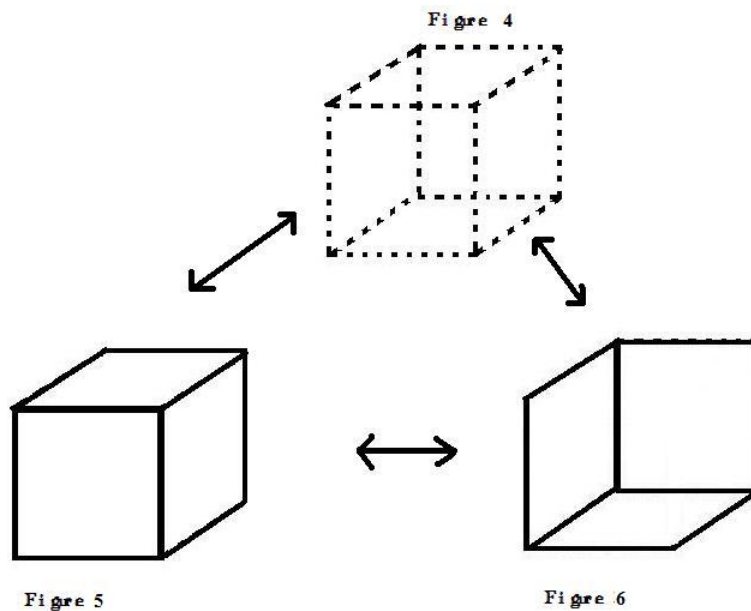


Then the student will be told to look back at Figure 4 and identify another cube that is directed towards a different angle. This cube will have the side facing the reader directed toward the top right will look like Figure 6.

FIGURE 6



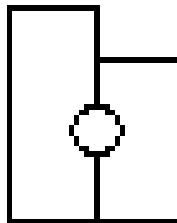
Both images can be seen from the same outline of Figure 4. Now the goal is to train the mind in the way it perceives the image by switching between both views. This is accomplished by looking at Figure 4 and then seeing Figure 5, back to Figure 4 and then to Figure 6. Once this is easy, the student will go from Figure 5 to Figure 6 as fast as possible. A trick in doing this is to look at the square face, either the bottom left or the top right, and then bring it forward to create both images.



This might take some time. The more it is practiced the easier it will become. This exercise trains the student to work their brains in a new way and see different perspectives. The goal is to force analysts to see an image in not just one way and this can be accomplished with the use of a very simple exercise.

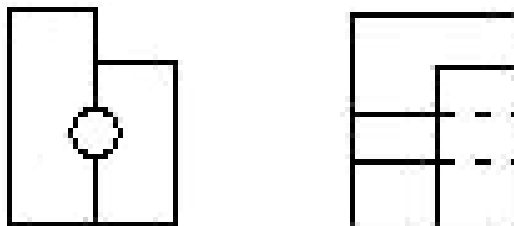
The next step is training analysts to get more out of a situation than what originally appears to be available. To do this, a basic understanding of mechanical drawing is used. Take Figure 7, which is an image of an object viewed from the side.

Figure 7



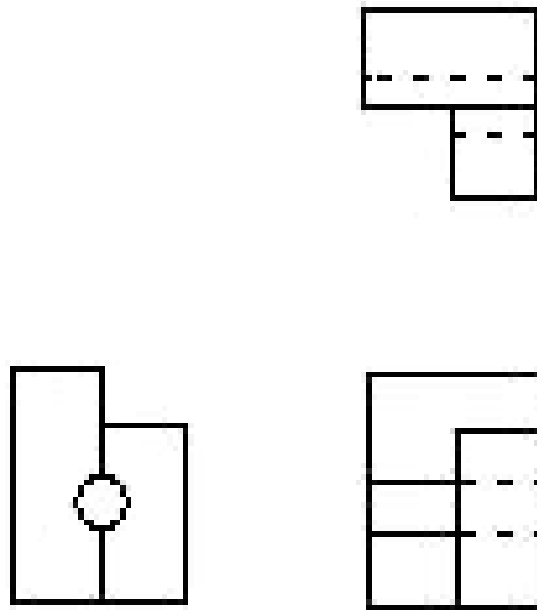
The student will be asked what information can be gathered about the overall shape of this object. The answer should be very little from this perspective alone. They will then be told to look at Figure 8 which has added another angle to the object.

Figure 8



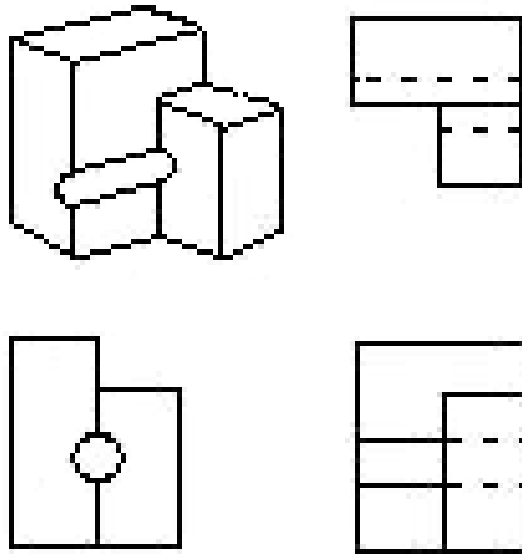
Again, the student will be asked how much information they can gather about the overall shape of this object. The answer should be very different if the student has been trained to think analytically and use what they have in front of them to build the bigger picture. Using the two perspectives from Figure 8, they should be able to draw the view from the top as depicted in Figure 9.

Figure 9



This is done by taking measurements from the first two sides and drawing the shape of the top within the boundaries set by the first two images. The image starts to come to life. When students become experienced getting this far, they can then try drawing the 3-dimensional object as depicted in Figure 10.

Figure 10



The focus of this exercise is on the ability to literally draw conclusions, in this case, about a 3-dimensional object with only two given perspectives. This is a great analogy of what intelligence analysts are expected to do in an operational environment. Very rarely will all the information be present with time to act. There will instead only be pieces of the puzzle that must be put into perspective, that will paint a clearer picture of what is actually happening. Once this task is mastered, it will be easier for the analysts to search for clues and to know how to approach any situation that may be presented.

The next step in this lesson is tying what has been learned not only to the development of a more apparent picture, but to the understanding that there are different ways to view a problem. More specifically, to learn that the enemy will not look at a problem the same way as the United States. It is important to stress this point or the whole lesson will be lost and only portions of the battles can be won. The current enemy the United States faces has a completely different perspective on life than the average American. They were raised differently, hold different values and beliefs sacred, and will fight in different ways than expected. It is important that we train our soldiers not only to understand their way of life and culture, but to use it when studying the motives behind their actions. Without this

knowledge, there will be no way that they will be able to suggest a successful course of action. The trainer must take the tools used here and the tools used in the course and apply them to real life problems. By using the learned knowledge, it forces students to get out of a habitual mode of thinking that might get them and their soldiers killed. Once an analyst understands how to think clearly and with the least amount of bias possible, they then need to learn how the enemy thinks and their biases. They will then be able to use their analytical skills to see the entire picture, suggest the best course of action, win the battle, and eventually, win the war.

¹ Richard J. Heuer, Jr. Psychology of Intelligence Analysis. Center for the Study of Intelligence, 1999.

² Heuer, 8.

³ Heuer, 8

⁴ Heuer, 10.

⁵ Heuer, 11

⁶ Heuer, 11.

⁷ Heuer, 12

⁸ O'Connor, T. "Analytical Methods in Intelligence Analysis ." MegaLinks in Criminal Justice 18 January 2007.

⁹ Heuer, 13